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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,641	11/30/1999	Danchen Gao	C-3169/1/US	9327

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PHARMACIA CORPORATION  
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EXAMINER

TRAN, SUSAN T

ART UNIT PAPER NUMBER

1615

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/451,641	<b>Applicant(s)</b> GAO ET AL.	
	<b>Examiner</b> Susan T. Tran	<b>Art Unit</b> 1615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10,12-50,72-75,84 and 86-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10,12-50,72-75,84 and 86-90 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 11/17/05 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-10, 12-50, 72-75, 84 and 86-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPS Annual Meeting Contributed Papers Abstracts (AAPS), in view of Black EP 0 863 134, or Plachetka US 6,586,458, or Block et al. US 6,440,967.

AAPS teaches a celecoxib (Cox-2 inhibitor) formulation that exhibits a  $C_{\max}$  values of 1527 and 1077 ng/mL, and a  $T_{\max}$  of 1.9 hours (see page D32).

AAPS does not teach the use of excipients in the formulation. However, the use of excipients in oral formulations is well known in pharmaceutical art.

Black teaches a compound useful as a Cox-2 inhibitor for pain relief, fever and inflammation of a variety symptoms disclosed on page 3, lines 29-36. The compound can be administered orally in the form of tablets, troches, lozenges, or capsules (page 4, lines 1-12). The tablets comprising active ingredient in admixture with excipients, e.g., diluents, disintegrants, binding agents, wetting agents, and surfactant (page 4, lines 15-38). The active agent present in an amount of 10 to 250 mg, and carrier material may vary from about 5 to about 95% (page 5, lines 39-58). The dosage can be administered once or twice a day, and will provide effective  $T_{1/2}$  over a 24 hours period (page 5, lines 22-27). Example 2 discloses the amount of excipients use in a tablet.

Plachetka teaches a pharmaceutical composition comprising COX-2 inhibitor includes celecoxib (column 4, lines 8-9). Celecoxib can be formulated into tablet for once or twice per day in an amount of about 100 mg to 200 mg (column 6, lines 65 through column 7, lines 1-7). Plachetka also teaches the composition can be formulated into capsule, and other single dosage form with the use of excipients, such as filler, disintegrants, and wetting agents (column 10, lines 54-67).

Block teaches a pharmaceutical formulation comprising COX-2 inhibitor includes celecoxib (column 15, lines 11-12). The composition is formulated into solid dosage form such as powder, capsule, tablet or pill with the use of pharmaceutical carrier (column 18, lines 17-33; and examples 3-5). Block also teaches the amount of COX-2 is from 1-600 mg (column 22, lines 60-67).

Thus, it would have been obvious for one of ordinary skill in the art to modify the formulation of AAPS using the excipient/carrier in view of the teachings of Black, Plachetka, or Block to obtain the claimed invention, because the references teach oral dosage form of Cox-2 inhibitor including celecoxib that is useful in pharmaceutical art, and because AAPS teaches orally administering celecoxib in fine suspension and capsule forms having the claimed  $C_{max}$  and  $T_{max}$  values.

It is noted that AAPS does not expressly teach the particle size distribution, however, the burden is shifted to applicant to show that the formulation of AAPS does not have the claimed particle size distribution, because AAPS teaches the oral formulation of celecoxib having the claimed  $C_{max}$  and  $T_{max}$  values.

Claims 1, 2, 4-10, 12-50, 72-75, 84 and 86-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPS Annual Meeting Contributed Papers Abstracts (AAPS), in view of Black EP 0 863 134 and Zhang et al. US 5,543,099.

AAPS and Black are relied upon for the reason stated above. It would have been obvious to one of ordinary skill in the art that the celecoxib formulation taught by AAPS would have the claimed particle distribution since AAPS teaches the same active agent in formulation that exhibits the same  $C_{max}$  and  $T_{max}$  values. However, to be more specific, Zhang is cited for the teaching that it is well known in the art to micronize active ingredient to obtain excellent content uniformity, consistent release profile, and good bioavailability (column 3, lines 8-17). Thus, it would have been obvious to one of ordinary skill in the art to modify the formulation of AAPS and Black to micronize the

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active agent, namely celecoxib in view of the teaching of Zhang to obtain the claimed invention, because Zhang teaches active granule having excellent content uniformity, because Zhang teaches granule having the claimed particle size, e.g., from 0.1 to 50 micrometers (column 3, lines 53-55), and because Zhang teaches micronizing active agent having similar property as the claimed celecoxib, such as highly water-insoluble (column 3, lines 25-29).

### ***Response to Arguments***

Applicant's arguments filed 11/17/05 have been fully considered but they are not persuasive.

Applicant argues that nowhere does the AAPS reference describe or suggest whether the capsule containing celecoxib comprised excipients, nor is any mention or suggestion made of whether the celecoxib is particulate, much less whether the celecoxib has a particle size distribution as set forth in claim 1. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It is well known in pharmaceutical art to formulate an oral dosage form with the use of excipient, much less AAPS was cited in view of Black for the teaching of excipient.

Regarding the particle distribution, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of the

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claimed product. Whether the rejection is based on inherency under 35 U.S.C. 102, on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)). Furthermore, it is also well known in pharmaceutical art to micronize the active ingredient, especially those active that is high water-insoluble (see Zhang).

Applicant argues that Black does not teach celecoxib. However, Black is not relying for the teaching of celecoxib. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Black is relied upon for the teaching of solid oral dosage composition using excipient.

### ***Claims Allowable***

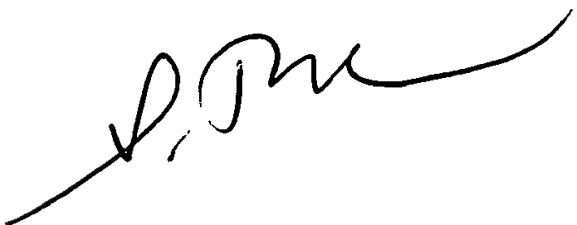
Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-R from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Tran  
Patent Examiner  
AU 1615